



Project Profile:

Briar Lane

Mt. Zion Township, IL

Challenge

This oil and chip roadway in a rural subdivision was constructed with sub-standard materials consisting of asphalt millings, recycled base rock and waste rock. The roadway had numerous failures due to this under-designed pavement structure. Funding was not available for total reconstruction. The road was the only entry to the subdivision and needed to be kept open to traffic at all times.

Solution

A 7-inch soil cement base stabilization incorporating the existing aggregate base and oil and chip surface with the underlying clay subgrade provided the necessary strength to support the anticipated traffic.
Construction Phasing

Phase 1: Till existing roadway 6-inches deep incorporating existing base and surface material.

Phase 2: Incorporate approximately 7 percent Portland cement by weight, add sufficient water to achieve optimum moisture and mix to a depth of 7 inches and compact to optimum density.

Phase 3: Apply bituminous prime coat at one-half gallons/sy and allow to cure for 72 hours.

Phase 4: Apply A-2 bituminous surface treatment with asphalt emulsion and crushed stone seal coat aggregate.

Result

- Quality road requiring little maintenance for many years.
- Project completed within customer's budget.
- Road kept open to traffic during entire project.

